

REMARKS

Claims 1-28 are pending in the present application. Claims 7-9, 11, 13, 15-22 and 28 stand rejected. Claims 10, 12 and 14 are objected to. Claims 1-6 and 23-27 are allowed. Claim 16 has been amended. No claims have been canceled or added.

I. Notices of Change in Power of Attorney

Notices of a change in the Power of Attorney were sent out on November 14, 2002. Applicant respectfully submits that these Notices were in error. While a copy of the original declaration with a correspondence address to "Arnold White & Durkee" was submitted with the application when filed, a copy of the current Power of Attorney for the parent file signed by the Assignee was also submitted at the time of filing. This copy as filed designates attorneys from and that correspondence be delivered to "Howrey Simon Arnold & White, LLP." Applicant respectfully requests appropriate correction.

II. Objections to the Specification

The Office Action states that the specification makes improper use of the trademark VELCRO and requests appropriate correction. Applicant has amended the specification accordingly at both locations that the term "velcro" was used, and submits that this objection has thus been obviated. Applicant also respectfully submits that no new matter has been introduced by way of these amendments, and points to the fully amended paragraph at page 9 as added support for the inherent amended language of "other removably attaching means as would be readily understood by one skilled in the art."

The Office Action also notes that the application lacks the necessary reference to the prior application. Applicant has likewise amended the specification with a specific introductory paragraph, and respectfully submits that this objection has also thus been obviated.

III. Rejections under 35 U.S.C. §§ 102 and 103

Claims 7-9, 11, 13, 15-21 and 28 stand rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,045,691 to McDermott ("McDermott"). In addition, Claim 22 stands rejected under 35 U.S.C. § 103 as being unpatentable over McDermott. In particular, the Office Action states that "McDermott discloses . . . a filter body, seen as troughs (4) . . . and one or more fluid displaceable adsorbent containers with[in] the filter body, seen as sock (2) and bag (3) in Fig. 2." Applicant respectfully traverses these § 102 and § 103 rejections.

In order to anticipate a claim, a reference must include every material element of that claim. Applicant points out that independent claims 7, 16 (as amended) and 28 all recite "one or more adsorbent containers *within* said filter body" (emphasis added), and respectfully submits that McDermott does not disclose such a relationship. McDermott thus cannot anticipate claims 7, 16 and 28. While the Office Action states that "McDermott discloses . . . a filter body seen as troughs (4)," Applicant respectfully submits that these troughs are not filter bodies and that nothing in McDermott states or can be read to suggest that these troughs are filter bodies. Rather, McDermott explicitly states in its Abstract that these "troughs *support* an absorbent sock and *directs* storm water to openings between the troughs where the storm water discharges into a semi-permeable bag" (emphases added). Furthermore, at col. 3 line 55 (and reinforced in its claims), McDermott states that "my invention have a plurality of troughs that are impermeable to water," which clearly teaches away from these troughs being a filter body.

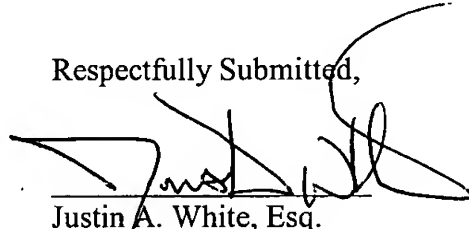
Applicant also notes that if one were to consider the semi-permeable bag (3) of McDermott as a filter body and its sock (2) as an adsorbent container, then the required relationship in pending claims 7, 16 and 28 of “one or more adsorbent containers *within* said filter body” would still not be met by McDermott. Not only is its sock clearly outside of its semi-permeable bag, as seen in Figure 2, but McDermott expressly teaches away from its sock being within its bag at, *inter alia*, col. 3 line 51 through col. 4 line 13.

For at least the foregoing reasons, Applicant respectfully submits that McDermott does not anticipate independent claims 7, 16 and 28. Because claims 8-9, 11, 13 and 15 all depend from claim 7, these claims are also not anticipated by McDermott for at least the same reasons. Regarding claim 13, Applicant submits that lips (5) of McDermott do not “cooperatively engage with [any] filter body” and also do not “substantially maintain [any] filter body in a pre-selected shape and position within said inlet” as required by this claim. Regarding claim 15, Applicant resubmits that the troughs of McDermott are not filter bodies, and that, furthermore, silt and sedimentation will inherently wash away into the bags or collect on the top of the sock, but will not collect at the bottom of the trough, as that is covered by the sock. Because claims 17-22 all depend from claim 16, these claims are also not anticipated by McDermott for at least the same reasons as for claim 16. Regarding claims 21 and 22, Applicant submits that McDermott does not disclose or suggest the attachment of an adsorbent container to a filter body. Applicant submits that McDermott teaches away from such a relationship, and points to the passage in McDermott at col. 6 line 3 that states “my invention slips into any storm sewer opening without the need for fasteners or involving any complicated installation.” Accordingly, Applicant respectfully requests the withdrawal of these rejections for claims 7-9, 11, 13, 15-22 and 28.

CONCLUSION

Applicant respectfully submits that all claims are in proper form and condition for patentability, and requests a notification of allowance to that effect. It is believed that no fee is due at this time. Should any fee be required for any reason related to this document, however, the Commissioner is hereby authorized to charge said fee to Deposit Account No. 08-3038, referencing Docket No. 11533.0012.CNUS06.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Justin A. White', is written over a horizontal line.

Justin A. White, Esq.

Reg. No. 48,883

Howrey Simon Arnold & White, LLP

Box 34

301 Ravenswood Avenue

Menlo Park, California 94025

(650) 463-8100

Date: January 17, 2003

APPENDIX A—Version with Markings to Show Changes Made
SPECIFICATION SHOWING AMENDMENT OF 1/17/03

Added paragraph beginning at page 1 line 1:

NOTICE OF PRIORITY

The present application is a continuation of and claims priority from U.S. Application No. 09/384,932, filed August 27, 1999, now abandoned, which application is commonly assigned and which is hereby incorporated herein in its entirety by reference.

Revised paragraph beginning at page 3 line 25:

In another embodiment, the filter body is supported in the inlet and forms a trough around the perimeter of the inside wall of the inlet. The interior wall of the trough forms a dam that is lower than the outer wall of the trough. Adsorbent pouches can be preferably removably attached, such as by [velcro] VELCRO®, any similar hook and loop fastener, or other removably attaching means as would be readily understood by one skilled in the art, to the outer wall and the dam of the trough. During periods of fluid flow, such as storm water runoff, the fluid flows into the inlet and enters the filter body. As the level of the water rises in the filter body, it causes the adsorbent pouches to float. As the pouches float, the fluid is exposed to the adsorbent thereby allowing contaminants to be removed from the fluid. When fluid completely fills the filter body, the fluid flows over the dam and into the drainage system.

Revised paragraph beginning at page 9 line 15:

One or more adsorbent containers can be attached to the interior of the filter body. Such containers are of a permeable material, such as a net pouch, bag or the like. The adsorbent containers are filled with an adsorbent material. One example of an adsorbent material is an inert inorganic blend of amorphous siliceous material containing sodium, potassium and aluminum silicates. The adsorbent containers can be attached in a variety of ways to the interior of the filter body, such as by clips, snaps, loops, [velcro] VELCRO® or any similar hook and loop fastener and the like. In a preferred embodiment, the adsorbent containers are removably attached to the interior walls of the filter body such that as the filter body fills with fluid, the adsorbent containers float, exposing the fluid to the adsorbent material contained therein. As illustrated in Figures 5 and 6, adsorbent containers 27 are situated along the outer wall of the filter body, and along the interior of the dam.

CLAIMS SHOWING AMENDMENT OF 1/17/03

1. An apparatus, comprising:
 - (a) a filter body dimensioned to fit within an inlet and forming a trough obstructing at least a portion of said inlet;
 - (b) a filter body support dimensioned and adapted to cooperatively engage with said inlet and with said filter body to substantially maintain said filter body in a pre-selected shape and position within said inlet;
 - (c) one or more connectors removably connecting said filter body to said filter body support; and
 - (d) one or more fluid displaceable adsorbent containers within said filter body.
2. The apparatus of Claim 1 wherein said filter body forms a trough along at least a portion of one wall of said inlet.
3. The apparatus of Claim 1 wherein said filter body forms a trough around the perimeter of the inside wall of said inlet.
4. The apparatus of Claim 1 wherein said one or more fluid displaceable adsorbent containers comprise one or more adsorbent pouches removably connected to the interior of said filter body.
5. The apparatus of Claim 1 whereby said one or more fluid displaceable adsorbent containers float as said filter body fills with fluid.
6. The apparatus of Claim 5 whereby said one or more fluid displaceable adsorbent containers float at or near the fluid surface within the filter body.
7. A catch basin filtration system, comprising:
a filter body dimensioned to fit within an inlet and obstructing at least a portion of said inlet; and

- one or more fluid displaceable adsorbent containers within said filter body.
8. The catch basin filtration system of Claim 7 wherein said one or more fluid displaceable adsorbent containers comprise one or more adsorbent pouches removably connected to the interior of said filter body.
 9. The catch basin filtration system of Claim 8 wherein said one or more adsorbent pouches are filled with a removable adsorbent material.
 10. The catch basin filtration system of Claim 8 further comprising:
a filter body support dimensioned and adapted to cooperatively engage with said inlet and with said filter body to substantially maintain said filter body in a pre-selected shape and position within said inlet; and
one or more connectors removably connecting said filter body to said filter body support, wherein said filter body forms a trough around the perimeter of an inside wall of said inlet.
 11. The catch basin filtration system of Claim 7 wherein said filter body is dimensioned to include a high fluid flow bypass route.
 12. The catch basin filtration system of Claim 11 wherein said high fluid flow bypass route comprises an overflow opening at the center of the filtration system.
 13. The catch basin filtration system of Claim 7 further comprising:
one or more filter body support brackets dimensioned and adapted to cooperatively engage with said filter body to substantially maintain said filter body in a pre-selected shape and position within said inlet.
 14. The catch basin filtration system of Claim 13 wherein said one or more support brackets are configured to traverse the filter body in an X shape.

15. The catch basin filtration system of Claim 7 wherein said one or more fluid displaceable adsorbent containers are displaced such that debris and sedimentation collects at the bottom of said filter body.
16. A method of separating contaminants from storm runoff, comprising:
 - (a) retaining said runoff in a catch basin filtration system, said system comprising a filter body dimensioned to fit within an inlet and forming a trough obstructing at least a portion of said inlet; and
 - (b) exposing said runoff to one or more fluid displaceable adsorbent containers within said filter body [system].
17. The method of Claim 16 whereby said one or more fluid displaceable adsorbent containers float at or near the fluid surface within the filter body as runoff is processed through said system.
18. The method of Claim 16 further comprising the step of:
 - (c) bypassing excess runoff without exposing said runoff to said one or more fluid displaceable adsorbent containers.
19. The method of Claim 16 wherein said one or more fluid displaceable adsorbent containers comprise one or more adsorbent pouches removably connected to the interior of said system.
20. The method of Claim 16 wherein said one or more fluid displaceable adsorbent containers are displaced such that debris and sedimentation collects at the bottom of said system.
21. The method of Claim 16 wherein at least one of said one or more fluid displaceable adsorbent containers attaches to said filter body.

22. The method of Claim 21 wherein at least one of said one or more fluid displaceable adsorbent containers attaches to the interior of said filter body via one or more attaching means selected from the group consisting of clips, snaps, loops and [velcro] VELCRO® or any similar hook and loop fastener.
23. A catch basin filtration system, comprising:
- (a) a filter body dimensioned to fit within an inlet and forming a trough obstructing at least a portion of said inlet;
 - (b) a filter body support dimensioned and adapted to cooperatively engage with said inlet and with said filter body to substantially maintain said filter body in a pre-selected shape and position within said inlet;
 - (c) one or more connectors removably connecting said filter body to said filter body support; and
 - (d) one or more fluid displaceable adsorbent pouches removably connected to the interior of said filter body, whereby said one or more fluid displaceable adsorbent pouches float at or near the fluid surface within the filter body as said filter body fills with fluid.
24. The catch basin filtration system of Claim 23 further comprising:
- (e) a filter body positioning element situated along at least a portion of the perimeter of the filter body.
25. The catch basin filtration system of Claim 24 wherein said filter body positioning element comprises an inflatable member urged against an inside wall of said inlet and securing said filter body in position.
26. A catch basin filtration system adapted for separating contaminants from storm runoff and dimensioned to fit within a catch basin, said catch basin filtration system comprising one or more fluid displaceable adsorbent containers.

27. The catch basin filtration system of Claim 26 wherein said one or more fluid displaceable adsorbent containers removably attach to the remainder of said catch basin filtration system.
28. A catch basin filtration system, comprising:
a filter body dimensioned to fit within an inlet and obstructing at least a portion of said inlet; and
one or more adsorbent containers within said filter body, said one or more adsorbent containers adapted to become displaced as said filter body fills with fluid.